

1. How should a biofuel sustainability system be designed?

Question 1.1:

Do you think the "possible way forward" described above is feasible?

Question 1.2

What do you think the administrative burden of an approach like the "possible way forward" would be? (If possible, please quantify your answer.)

Question 1.3

Please give your general comments on the "possible way forward", and on how it could be implemented. Does it give an adequate level of assurance that biofuels will be sustainably produced?

If you think the problem should be tackled in a different way, please say how, giving details of the procedures that would be used.

Question 1.4

Carbon stock differences between land uses would be taken into account under criterion 2. Should they also be taken into account under criterion 1? If so, what method should be used to determine how the land in question would have been used if it had not been used to produce raw material for biofuels?

Question 1.5

As described in the "possible way forward", criterion 3 focusses on land uses associated with exceptional biodiversity. Should the criterion be extended to apply to land that is adjacent to land uses associated with exceptional biodiversity? If so, why? How could this land be defined?

Question 1.6

How could the term "exceptional biodiversity" (in criterion 3) be defined in a way that is scientifically based, transparent and non-discriminatory?

Our basic attitude to sustainability aspects is to set out a clear biofuel policy as soon as possible in order to stimulate private investments. Environmental sustainability criteria should address the effective GHG emission as well as long term availability of the feedstocks. Regarding today's still relatively small biofuel contribution to global transportation fuel markets it is too early as to apply too restrictive instruments to govern the development.

2. How should overall effects on land use be monitored?

Question 2.1

Please give your comments on the "possible way forward" described above. If you think the problem should be tackled in a different way, please say how.

Question 2.2

Do you think it is possible to link indirect land use effects to individual consignments of biofuel? If so, please say how.

Monitor land use effects and carefully develop suitable instruments, but do not take any restrictive measures too early in order not to starve current biofuel efforts!

In other words: we recommend a monitoring of but we would not agree for major restrictions until biofuels are really sharing a significant part of the overall fuel markets. The proposed obligation to go for 2nd generation fuels rather than 1st generation already implies measures to lower the conflict with the nutrition sector. Since this appears to be suitable at least until 2015 to stabilize food availability and prices no further restriction should be set up for biofuels. After accomplishment of the 5,75% target (may be after 2010) land use effects should be paid closer attention to.

3. How should the use of second-generation biofuels be encouraged?

Question 3.1:

How should second-generation biofuels be defined? Should the definition be based on:

- a) the type of raw materials from which biofuels are made (for example, "biofuel from cellulosic material")?**
- b) the type of technology used to produce the biofuel (for example, "biofuels produced using a production technique that is capable of handling cellulosic material")?**
- c) other criteria (please give details)?**

Question 3.2:

Please give your comments on the "possible way forward" described above. If you think the problem should be tackled in a different way, please say how.

Question 3.3

Should second-generation biofuels only be able to benefit from these advantages if they also achieve a defined level of greenhouse gas savings?

A definition of 2nd generation biofuels is only needed in case the Commission intends to implement a legislation giving different advantages to 2nd generation fuels compared with 1st generation. Generally we highly appreciate to give 2nd generation fuels a clear benefit. Basically the definition of 2nd generation biofuels must not only be based on the type feedstock. We recommend to establish a positive-list of raw materials indicating feedstocks which are allowed under the definition and additionally related to a counting system, giving those biomass feedstocks highest benefit that are contributing most to the targets (e.g. cereal hulls/husks < straw < wood; Other promotion: food-crops < non-food crops < wood from sustainable forestry). A good figure / criterion to consider several agricultural and technological features is the **per-hectare-yield (not by fuel volume but on an energy basis)**.

But to avoid such novel technologies claiming to process 2nd generation feedstock but working at poor conversion efficiencies, the type of technology must be considered as well. We therefore highly recommend to establish a technology quality criterion, indicating whether a technology shows a high potential under all criteria. This means to promote those technologies most, that are

able to process “highest rate 2nd generation feedstocks” at “maximum degree of conversion efficiency”. The latter shall be a net value taking into account e.g. to what extent auxiliary process energies or chemicals are of “black” or “green” origin (i.e. technologies with “black” parts shall not be excluded but their contribution to the biofuel target is to be lowered by the “black part”).

Apart from stand-alone biofuel plants / technologies it should also be allowed (counted) to produce 2nd generation biofuels as a co-product in existing infrastructures such as pulp mills. Advanced pulp mills which co-process e.g. black liquor into biofuels can be a very beneficial contribution to achieve large quantities within a short period of time. Therefore the Commission should go for the admission of these advanced pulp mill concepts.

Since 2nd generation biofuels appear to be the only solution on the long run, which is sustainable and which also offers a considerable contribution / market potential, we basically agree with the way forward as to give an advantage to 2nd generation fuels. An extra count for those fuels under national obligation systems seems to be a suitable model. As mentioned above big differences in different technologies (e.g. cellulose EtOH compared with BTL) must be smoothed by the system, considering a different level of desired contribution to the directive targets on the one hand and investor’s risks on the other hand. Therefore some sub-division of the count within the group of 2nd generation biofuels appears appropriate.

4. What further action is needed to make it possible to achieve a 10% biofuel share?

Question 4.1:

Should the legislation include measures to ensure that diesel containing 10% biodiesel (by volume) can be placed on the market, and is in fact placed on the market?

Question 4.2:

Should the legislation include measures to encourage the use of ethanol and biodiesel in high blends? If so, what?

Question 4.3:

Should the legislation include measures to encourage the use of biomethane, methanol and DME in transport? If so, what?

Major companies of the European automotive industry are heavily interested in biofuels, even more if they do not just offer the way into a sustainable future but also if they are better than what we have today. In terms of this 1st generation biofuels are just a small introductory step. Second generation biofuels instead do show a clearer environmental benefit, they are not in that deep competition with the nutrition sector and in terms of BTL they have much better quality than any other established liquid fuel. For automotive industry and future development synthetic BTL type fuels are a most desirable solution. Since BTL is an ideal fuel which also fits perfectly into existing infrastructure, we strongly recommend to encourage this route, rather than other fuels like methane, methanol or DME which might be technically possible but not desired by automotive industry.

Question 4.5:

Should the legislation ask the Commission to review, by a given date, whether it is possible to be confident that the 10% target can be achieved through:

- a) rules that allow 10% blending by volume of ethanol in ordinary petrol, plus**
- b) rules that allow 10% blending by volume of biodiesel in ordinary diesel, plus**
- c) the four options listed under 'other options for solving the problem';**

If so, what should the date be?

If the review were to conclude that the target is unlikely to be met, what action should the Commission take?

Question 4.6

More generally, what role should taxation play in the promotion of biofuels (considering different situations such as low blends, high blends and second-generation biofuels)?